



11-19-03

Application	10/077,732
Applicant	Nikolich
Art Unit	3651
Examiner	Crawford

1-8~~9~~18
Claims ~~1-18~~ (canceled)

9/6/04

Claim 9 (currently amended) apparatus according to claim [8] 21
and including a plurality of supply carts of identical construction,
the computer is capable of receiving signals from each of the
supply carts and functioning in relation to all of the supply carts, [as set
out in claim 8.]

Claim 10 (re-presented) Apparatus according to claim 9 wherein,
the apparatus includes a system computer, and a server computer,
and
the cart computer is capable of transmitting signals to the server
computer.

Claim 11 (re-presented) Apparatus according to claim 10 and
including a printer, and the server computer is operable for transmitting
signals to the recording means.

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Claim 12 (currently amended) apparatus according to claim [6] 21 wherein, the capacity of the supply bins [may be] is less than that of the storage bins.

the computer means is operable for sensing the number of articles in the supply bins and in the storage [bin] bins and, in response to the number in the supply bins being less than that in the storage bins, being capable of setting up a control signal,

[the apparatus also includes a recording means]

the computer means being capable of transmitting said control signal to the printer, and the printer, in response to receiving such control signal, being capable of printing a pick list containing the difference between the number of articles in the supply cart and the number in the storage cart.

13. A method for distributing a plurality of articles of different kinds, comprising the steps,

providing a storage area and a cart in the storage area,

the storage cart having a plurality of bins for supporting and identifying said articles,

providing a plurality of receiver areas at substantial distances from the storage areas and the receiver areas being adapted to be occupied by receivers capable of receiving said articles,

13. Cont'd

providing a plurality of supply carts at distributed locations, the supply carts having bins respectively identical with the bins in the storage cart and having identical identifying said articles put therein,

the supply carts being open and thereby enabling any person to withdraw articles therefrom and transport them to the receiver area,

providing supplemental panels having manually actuated means for registering articles placed in and withdrawn from the bins,

manually actuating the registering means, and

utilizing the computer means to register the difference in numbers of articles in the storage cart and the supply cart.

Claim 14 (currently amended) A method according to claim 13, [an] and including the steps, maintaining the supply cart in open condition indefinitely, withdrawing articles continuously throughout a predetermined overall period, independently of operation of other steps, and restocking articles from the storage cart through the supply cart, independently of operation of other steps.

15. A method according to claim 14 and including the steps of providing a single such storage cart, and a plurality of such supply carts at locations at substantial distances from the storage cart and from each other, and

utilizing each supply cart independently from each other for transmitting said signals to the storage cart.

16. A method according to Claim 13 and providing a security camera and utilizing it for operably photographing the supply cart throughout said predetermined period of operation of the supply cart.

17. Apparatus for use in distributing a plurality of articles of different kinds throughout a facility that has a central storage area, and a plurality of user areas distributed in the facility at substantial distances from the storage area, comprising,

a storage cart in the storage area having a plurality of storage bins for holding a corresponding number of said articles of different kinds,

the storage cart having labels individually identifying articles in the storage bins,

an open supply cart adjacent to each of the user areas and having supply bins for receiving and holding said articles, and the supply cart having labels individually identifying articles in the supply bins,

supplemental panels having push buttons operably associated with the storage bins,

the apparatus including a computer for registering signals from the push buttons,

the computer being operably associated with each supply cart, and operable in response to actuation of the push buttons in the respective supplemental panel for recording the withdrawing of articles from the supply cart, and including means for providing alert signal in response to the presence of hazardous materials in the articles.

18. (canceled)

Claim 19. Apparatus according to Claim 7 and including, signal means in each bin of the supply carts activatable by the user to identify the receiver of the articles withdrawn.

Claim 20 (new) Apparatus for use in distributing a plurality of articles of different kinds throughout a facility that has a central storage area, and a plurality of user areas distributed in the facility at substantial distances from the storage area, comprising,

a storage cart in the storage area having a plurality of storage bins for holding a corresponding number of said articles of different kinds,

the storage cart having labels individually identifying said articles in the storage bins,

an open supply cart having a plurality of shelves and bins on the shelves adjacent to each of the user areas,

a control panel corresponding to each of the shelves in each supply cart, and being separate in construction from the shelf and thereby being detachably mountable thereon,

the control panels being capable of being put in operable position independently of other elements on the shelves,

the control panels having manually actuatable control buttons respectively corresponding to and identifying said articles, and being closely adjacent the articles when the control panels are in operative position.

The panels being so positioned, when in operative position, as to enable a user to actuate a control button in the same movement of the hand used in placing said articles in the supply cart and removing them therefrom.

Claim 21 (new) Apparatus according to claim 20, and including a computer operably associated with each supply cart, and operable in response to actuation of the push buttons in the respective panel for recording the number of articles in the respective bins, and recording the withdrawing the articles from the respective bins.

Claim 22 (new) Apparatus for use in distributing a plurality of articles of different kinds throughout a facility that has a central storage area, and a plurality of user areas distributed in the facility at substantial distances from the storage area, comprising

a storage cart in the storage area having a plurality of storage bins for holding a corresponding number of said articles of different kinds,

the storage cart having labels individually identifying articles in the storage bins,

an open supply cart adjacent to each of the user areas and having supply bins for receiving and holding said articles, and the supply cart having labels individually identifying articles in the supply bins,

supplemental panels having push buttons operably associated with the storage bins, and the apparatus including a computer for registering signals from the push buttons.

Claim 23 (new) Apparatus according to claim 21 wherein, the capacity of the supply bins is less than that of the storage bins,

the computer means is operable for sensing the number of articles in the supply bins [and in the storage bins] and, in response to the number in the supply bins being less than [that] a predetermined safety

level in the storage bins, being capable of setting up a control signal,

the computer means being capable of transmitting said control signal to the printer, and the printer, in response to receiving said control signal, being capable of printing a pick list containing the difference between the number of articles in the supply cart and [the number in the storage cart] a predetermined maximum level in the storage bins.

Claim 24 (new) Apparatus for use in distributing a plurality of articles of different kinds throughout a facility that has a central storage area and a plurality of user areas distributed in the facility at substantial distances from the storage area, comprising

a storage cart in the storage area having a plurality of storage bins for holding a corresponding number of said articles of different kinds,

the storage cart having labels individually identifying articles in the storage bins

the storage cart having recording means for recording the identity of each of said articles, and also including a main set of panels and push buttons thereon corresponding to the articles respectively, and further including means for recording the identity of the articles in response to manual actuation of the push buttons,

the storage cart being a self-contained, operable unit,

the apparatus including a supply cart adjacent to each of the user areas,

a second set of panels corresponding to the panels of the main set,

the panels of the second set having push buttons corresponding to the push buttons of the main set, and

the apparatus including means for transmitting signals to the recording means in response to actuation of the push buttons of the second set.

Claim 25 (new) Apparatus according to claim 24 wherein,

the panels of the second set are mounted on the user carts in operable relation to the panels of the main set respectively.

Claim 26 (new) Apparatus according to claim 25 wherein,

the panels of the second set are mountable on the supply cart in operable position wherein they mechanically inhibit the actuation of the push buttons of the main set.

Claim 27 (new) Apparatus for use in distributing a plurality of articles of different kinds throughout a facility that has a central storage area, and a plurality of user areas distributed in the facility at substantial distances from the storage area, comprising,

a storage cart in the storage area having a plurality of storage bins for holding a corresponding number of said articles of different kinds,

the storage cart having labels individually identifying articles in the storage bins,

an open supply cart adjacent to each of the user areas and having supply bins for receiving and holding said articles, and the supply cart having labels individually identifying articles in the supply bins,

the storage cart and the supply carts having open fronts enabling the user to insert his hand into the storage bin and the supply bins,

the storage cart having push buttons corresponding to the articles in the storage cart respectively,

the supply cart having push buttons corresponding to articles in the storage bins respectively, and

means independent of the storage cart and the supply carts and movable selectively into operable relation to the push buttons on the storage cart or the push buttons on the supply carts respectively.

Claim 28 (new) Apparatus according to Claim 21 wherein,
the computer includes a bar code and reader unit.

Claim 29 (new) Apparatus according to claim 21 wherein,
the computer includes a radio-frequency (RF) identification reader.

Claim 30 (new) Apparatus according to claim 21 wherein,
the computer includes an infrared (IF) reader.

Claim 31 (new) Apparatus according to claim 21 wherein,
the computer includes an auxiliary keyboard.

Claim 32 (new) A method according to claim 13, and including the
steps, utilizing a bar code reader as an auxiliary means of registering
articles placed in and withdrawn from the bins.

Claim 33 (new) A method according to claim 13, and including the
steps, utilizing a radio-frequency (RF) identification reader as an
auxiliary means of requesting articles placed in and withdrawn from the
bins.

Claim 34 (new) A method according to claim 13, and including the
steps, utilizing an infrared (IR) reader as an auxiliary means of
requesting articles placed in and withdrawn from the bins.

Claim 35 (new) A method according to claim 13, and including the steps, utilizing an auxiliary keypad as an auxiliary means of requesting articles placed in and withdrawn from the bins.

Claim 36 (new) A method according to claim 35, and including the steps, utilizing a bar code reader as an auxiliary means to identify the users of the articles withdrawn

Claim 37 (new) A method according to claim 35, and including the steps, utilizing a radio-frequency (RF) identification reader as an auxiliary means to identify the users of the articles withdrawn.

Claim 38 (new) A method according to claim 35, and including the steps, utilizing an infrared (IR) reader as an auxiliary means to identify the users of the articles withdrawn.

Claim 39 (new) A method according to claim 35, and including the steps, utilizing an auxiliary keypad as an auxiliary means to identify the users of the articles withdrawn.

Claim 40 (new) A method according to claim 13, and including the steps, submitting a charge event to a billing system when a user is identified and an article is withdrawn from a bin.

Claim 41 (new) A method according to claim 13, and including the steps, submitting an assignment event to a manufacturing management system when a user is identified and an article is withdrawn from a bin.

Respectively submitted

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